



Universal Waste



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Universal Waste

Basics

- Universal waste is solid waste.
- Universal waste is hazardous waste.
- Described in:
 - [401 Kentucky Administrative Regulations \(KAR\) Chapter 43](#)
 - References 40 Code of Federal Regulations (CFR) part 273; effective **July 1, 2005**





Universal Waste

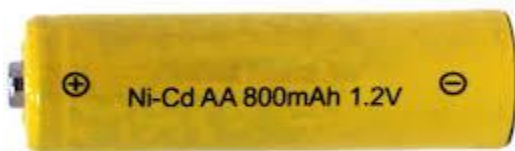
Program Goals

- Reduce regulatory burden on businesses
- Reduce illegal disposal of wastes
- Promote recycling



Universal Wastes in Kentucky

Batteries



Pesticides



Mercury Thermostats

Spent Lamps

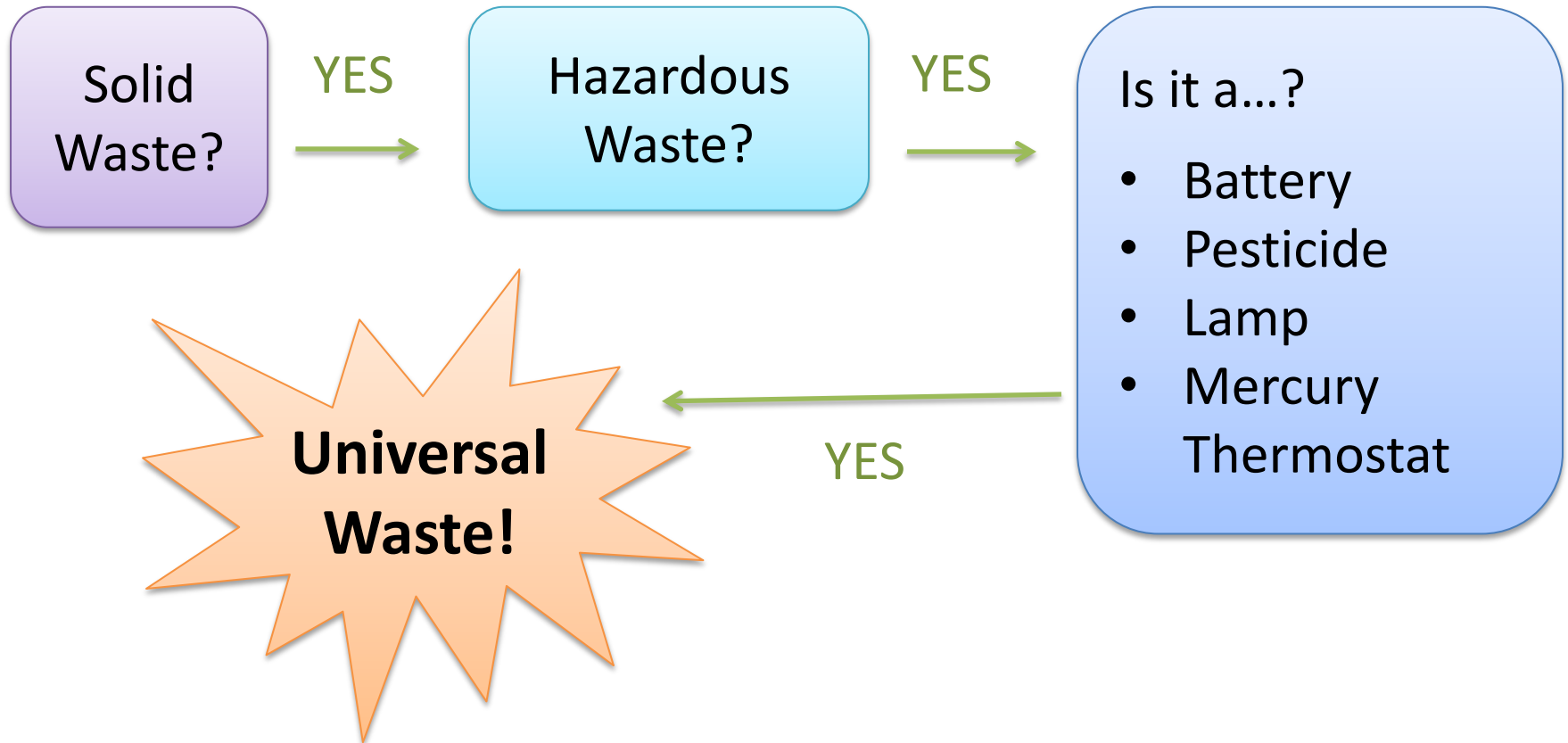
(a.k.a. light bulbs)





Thought Process

Universal Waste Determination



Pesticides

- A pesticide is a substance or agent used to kill pests (i.e. insects, rodents, weeds).
- Pesticides include:
 - Insecticides
 - Herbicides
 - Rodenticides
 - Fungicides
 - Etc.



Pesticides

A pesticide is a waste when the product has

- been recalled
- become obsolete
- become damaged
 - the pesticide, not the container
- or is no longer needed



Lamps

Spent lamps such as incandescent, fluorescent, high-intensity discharge, neon, mercury-vapor, high-pressure sodium and metal-halide lamps.



Lamps

A lamp becomes a waste when the handler takes it out of service or discards it.



Mercury Thermostat



This is a temperature-control device that contains metallic mercury attached to a bimetallic sensing element.



NOTE: The thermostat becomes a waste when you decide to take it out of service and discard it.

Batteries

Batteries, such as nickel-cadmium (Ni-Cd) and sealed lead-acid batteries.

- Commonly found in handheld equipment (i.e. power tools) and devices (i.e. cell phones, laptops), vehicles and emergency backup lighting.

HINT: Reading labels may assist you with identifying universal wastes.



Batteries

When does a battery **become** a waste?





Waste Determination Insights

If manufacturer supplies documentation stating the item is **NOT HAZARDOUS**, the item **MAY BE** disposed of as solid waste.



“Toxicity Characteristic Leaching Procedure” is a test that will prove a waste is not hazardous.

****More than one item (i.e. bulb) must be tested****



Common Terms

Universal Waste Regulatory Scheme

Handlers

A generator (e.g. accumulates/stores) of universal waste.



Transporters

A person/entity engaged in the off-site transportation of universal waste by air, rail, highway or water.



Destination Facilities

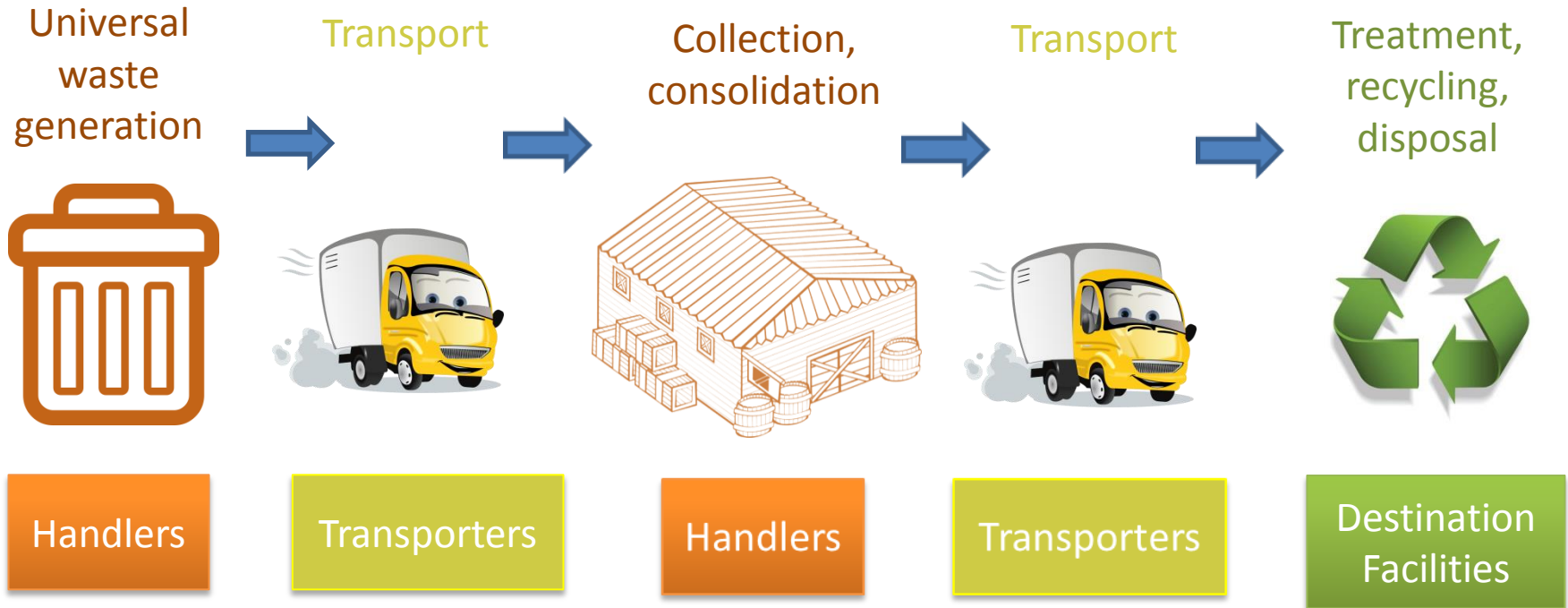
Any entity that treats, recycles or disposes of universal waste.



NOTE: Transporters may only store universal wastes at a transfer facility for 10 days or less. After 10 days, they become a handler.

Thought Process

Universal Waste Regulatory Scheme



NOTE: The focus of this presentation is designed for handlers.



Universal Waste Handler Status

- Small-Quantity Handler
 - <11,000 lbs. on-site at one time (total)
- Large-Quantity Handler
 - $\geq 11,000$ lbs. on-site at one time (total)





Basic Requirements

Small- and Large-Quantity Handlers

- Accumulation time limit is one year.
- Releases must be prevented.
- All storage containers must be properly labeled.
- Employees must be trained regarding universal waste handling and emergency response procedures.



Basic Requirements

Small- and Large-Quantity Handlers

- May self-transport universal waste to destination facilities.
- Hazardous waste manifests are not required.

Note: Before transporting, check with the Department of Transportation for potential requirements.





Large-Quantity Handlers

Additional Requirements

- [DEP7037 Form, Notification of Hazardous Waste Activity – Section B](#)
- Obtain an EPA identification number
- Keep a record of each shipment received or sent
 - e.g. bills of lading, logs, etc.





Universal Waste Labels

- Must be labeled as “universal waste”
- Contents must be labeled (i.e. spent lamps)
- Must have accumulation start date

Universal Waste

Spent Lamps

Accumulation Start Date:

May 25, 2016

Storage Containers

- Must be
 - Structurally sound
 - Compatible with contents
 - Closed
 - Lack evidence of leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions





Release Prevention Tips

- Store items upright to reduce leaks.
- Store indoors to avoid extreme temperature changes that could cause the waste items to burst.
- Avoid stockpiling and long-term storage.



Release Prevention Tips

- Prevent further damage to waste items.
- Double-bag damaged waste items in sturdy plastic tubs or plastic bags to reduce leakage.
- Keep supplies, such as safety equipment and cleanup materials, near the storage area.





In the event of a release

For cleanup details and proper management of cleanup materials, contact the **Division of Waste Management's Complaints Coordinator.**

- Call 502-564-6716.
- E-mail waste@ky.gov.





In the event of a release

Mercury Spill

First steps

1. Do not touch the mercury.
2. Get people and pets out of the area and take care they don't walk through the mercury.
3. Turn off heating, air conditioning and ventilation systems that could spread the vapors.
4. Open windows and doors to the outside for ventilation.
5. Assess the situation.





In the event of a release

Mercury Spill

- *Is the spill **larger than the amount from a fever thermometer** (.5 to .7 grams)?*
 - Call the Kentucky Environmental Response Team at 502-564-2380 or 800-928-2380.
- Is the spill one pound (about **two tablespoons**) or more?
 - Call the National Response Center's 24-hour hotline: 800-424-8802 or 202-267-2675.



In the event of a release

Battery Acid Leak

- Don't pour battery acid on the ground or in a drain.
- Small acid spills should be contained and can be neutralized using lime or bicarbonate soda (i.e. baking soda).
- All residues must be contained and disposed of properly as hazardous waste.



Hazardous Wastes

If any of your universal waste is broken, leaking, crushed or damaged, it (and cleanup materials) may require being managed as hazardous waste.



NOTE: If managing universal waste lamps by crushing (once the bulb is crushed), it is to be managed as hazardous waste.

Hazardous Wastes

Mercury-Containing Devices Commonly Misidentified as Universal Wastes in Ky.



- Switches
- Relays
- Gauges
- Thermometers
- Blood pressure cuffs



Resources

- DEP Forms Library

<http://dep.ky.gov/formslibrary/Pages/default.aspx>

- DWM Factsheets

<http://waste.ky.gov/RLA/Documents/RLA%20Web%20Topics%20A-Z.pdf>

- DCA Helpful Resources

<http://dca.ky.gov/Pages/ResourceDocuments.aspx>

- Kentucky Administrative Regulations

<http://www.lrc.ky.gov/kar/title401.htm>





Questions

- Division of Compliance Assistance

800-926-8111

dca.ky.gov

envhelp@ky.gov

- Division of Waste Management

502-564-6716

waste.ky.gov

waste@ky.gov





Questions

For **specifics** regarding your requirements and reporting, please contact your **Regional Office Inspector**.

<http://waste.ky.gov/Pages/fieldoffices.aspx>

